

DEPARTMENT OF COMMERCE

BUREAU OF STANDARDS

George K. Burgess, Director

CIRCULAR OF THE BUREAU OF STANDARDS, No. 277

[Issued July 7, 1925]

UNITED STATES GOVERNMENT MASTER SPECIFICATION FOR BLEACHED COTTON PILLOWCASES

FEDERAL SPECIFICATIONS BOARD SPECIFICATION No. 305

This specification was officially promulgated by the Federal Specifications Board on July 6, 1925, for the use of the Departments and Independent Establishments of the Government in the purchase of bleached cotton pillowcases.

[The latest date on which the technical and inspection requirements of this specification shall become mandatory for all Departments and Independent Establishments of the Government is October 6, 1925. They may be put into effect, however, at any earlier date, after promulgation]

CONTENTS

	Page
I. Grade.....	1
II. Material.....	1
III. General requirements.....	2
IV. Detail requirements.....	2
V. Method of inspection and tests.....	3
VI. Packing and marking.....	4
VII. Additional information.....	4
VIII. General specifications.....	4

I. GRADE

The pillowcases shall be of a grade commercially known as "firsts."

II. MATERIAL

The pillowcases shall be made of cotton thoroughly cleaned and free from waste. They shall be evenly woven and free from an excessive number of avoidable imperfections of manufacture.

III. GENERAL REQUIREMENTS

The pillowcases shall be one-piece material, either tubular or with a one-side seam as specified. If not specified in the proposal, the entire shipment shall be entirely of either.

The proposal shall state the size selected from any of the following standard sizes given in terms of inches for width and torn length as listed in Table 1. The lengths for each width are shown as A, B, and C.

TABLE 1.—*Sizes of pillowcases*

Width (in inches)	Length (torn)		
	A	B	C
	<i>Inches</i>	<i>Inches</i>	<i>Inches</i>
36.....	36	38½	40½
42.....	36	38½	40½
45.....	36	38½	40½

The pillowcases shall have a 3-inch hem (approximate) at the open end. The hem shall be straight and of uniform width. The turn under on the hem, end seam, and side seam shall be not less than one-fourth inch. The stitches in the hem shall not be less than 16 to the inch.

IV. DETAIL REQUIREMENTS

The woven fabric used shall conform to the following requirements:

1. **FINISH.**—The material shall be fully bleached unless a semi-bleach is otherwise specified in the proposal. Further detail requirements as to finish, if necessary, are stated in the proposal. (The proposal should state whether or not the bidder will be required to submit a sample or procure a sample for the desired finish in respect to the degree of whiteness, amount of calendering, and sheen.)

2. **WEAVE.**—The weave shall be plain.

3. **THREAD COUNT.**—The thread count shall be as given in Table 2 within the tolerance specified. A variation in the individual sample of plus or minus two threads from the average will be permitted.

4. **WIDTH.**—The width shall be as stated in the proposal within a tolerance of plus or minus 1 per cent. A variation in the individual sample up to plus or minus one-fourth inch from the average will be permitted.

5. **WEIGHT.**—The minimum weight per square yard shall be as given in Table 2.

6. **BREAKING STRENGTH** (1 by 1 by 3 inch grab method).—The minimum breaking strength shall conform to the amounts specified in Table 2.

7. **CONSTRUCTION TABLE.**—

TABLE 2.—Construction

Type	Minimum weight per square yard	Minimum thread count		Minimum breaking strength, 1 by 1 by 3 inch grab	
		Warp	Filling	Warp	Filling
High count.....	Ounces 4.3	Per inch 69	Per inch 62	Pounds 65	Pounds 60
Medium count.....	3.8	64	57	55	45

V. METHOD OF INSPECTION AND TESTS

1. SAMPLING.—On a basis of each 1,000 pillowcases or fraction thereof, one or more pillowcases shall be taken at random for test purposes.

2. ATMOSPHERIC CONDITIONS.—Tests may be made under prevailing atmospheric conditions except in the settlement of disputes where moisture is an influencing factor in tests for breaking strength, width, length, etc. Such tests shall then be made upon material having normal moisture content, obtained by exposure for at least four hours to an atmospheric condition of 65 per cent relative humidity at 70° F.

3. BREAKING STRENGTH (1 by 1 by 3 inch grab method).—Six test specimens 6 inches long by 4 inches wide shall be cut, three in the direction of the warp and three in the direction of the filling, respectively. Care shall be taken that no two test specimens include the same threads, except for retest as specified below. No sample for testing should be taken at less than 8 inches from either selvage.

The machine used shall be of the inclination balance type. The maximum capacity of the machine shall be 300 pounds. The lower or pulling jaw shall travel at a uniform rate of 12 inches per minute under no load. The distance between jaws shall be 3 inches at start. The inside or back half of each jaw shall be 2 inches or more in width; the other half shall be 1 inch in width. Jaws shall have a smooth and flat surface with edges slightly rounded to prevent cutting. The results of the test of each direction shall be averaged. If a specimen slips in the jaw, breaks in the jaw, breaks at the edge of the jaw, or for any reason due to faulty operation the result falls markedly below the general average, the result shall be disregarded, another specimen taken from the same threads, and the result of this break included in the average.

4. WEIGHT PER SQUARE YARD.—(a) *Method No. 1.*—Take 1 yard of the sample. Weigh, and if the width is not 1 yard, calculate the weight per square yard.

$$\frac{\text{Weight of linear yard}}{\text{width}} \times 36 = \text{weight of square yard}$$

Average two tests.

(b) *Method No. 2.*—Take a measured portion of the material and weigh. Calculate from this area the weight per square yard.

$$\frac{1,296 \times \text{weight of known area}}{\text{area in inches}} = \text{weight per square yard}$$

Average three tests.

(c) *Method No. 3.*—Cut from the sample a specimen 2 by 2 inches using a steel die. No specimen for testing shall be taken at less than 8 inches from either selvage. Weigh on a balance, adjusted to read the weight of the material in ounces per square yard. Average three to five tests.

5. **THREAD COUNT.**—The actual number of threads in 1 inch of width shall be counted in each direction at three different places in the cloth and the results averaged for each direction.

When the size of the sample permits, these counts shall be taken about 6 inches apart. No warp reading shall be taken at less than 8 inches from the selvage.

VI. PACKING AND MARKING

No details specified.

VII. ADDITIONAL INFORMATION

No details specified.

VIII. GENERAL SPECIFICATIONS

No details specified.

ADDITIONAL COPIES
OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.
AT
5 CENTS PER COPY